

ABSTRACT OF THE DISCLOSURE

A servo control system for a machine tool or the like requires only a single computational resource, such as a microprocessor, to provide coordinated control along multiple axes. No active control mechanism is required for any axis outside of the single resource. A real time multitasking approach enables the single resource to control multiple axes of motion, with the control of each individual axis being carried out by means of simple, yet effective, routines that conserve computing power. The routines also facilitate the generation of geometric designs in other media, such as the display of such shapes on a video screen or via a printer.